

AMENDMENT
U.S. Appln. No. 08/941,236

greater than 1 [taking into account] based on the response times of the components of said communications network.

4. (Amended) A method according to claim 1, wherein said [channel utilization] factor is inserted into the packets transmitted towards said destination customer-premises equipment.

5. (Amended) A method according to claim 1, wherein said [channel utilization] factor is transmitted in a special empty packet towards said destination customer-premises equipment in the absence of return traffic.

REMARKS

Claims 1-5 are all the claims pending in the application. Claims 1, 2, 4, and 5 have been amended by this response. Reconsideration and allowance of Applicant's claims are respectfully requested in view of the following remarks.

Applicant thanks the Examiner for acknowledging Applicant's claim for foreign priority under 35 U.S.C. § 119 and receipt of the certified priority documents.

Applicant acknowledges the indication of allowable subject matter in claim number 3.

Claims 1, 2, 4, and 5 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 5,633,861 to Hanson ("Hanson"). This rejection is respectfully traversed.

Claim 1 recites, among other things, determining a factor related to the rate at which

AMENDMENT
U.S. Appln. No. 08/941,236

packets are transmitted over said virtual connection towards said destination equipment "wherein said factor is based on the length of said queue and the time taken to transmit said factor to said data-rate management processor to prevent said queue from overflowing." Hanson is silent with regard to any such feature. The Action indicates that "Hanson teaches a method of determining a channel utilization factor (column 5, lines 63-66)." Although, Hanson describes one type of channel utilization factor, Hanson does not describe a factor that is based on "the length of said queue."

Claims 2, 4, and 5 depend from claim 1 and are believed to be allowable for at least the reasons given above. In addition, claim 2 recites, for example that the factor satisfies the relationship

$$\sum_i SIR_{i,t} \leq k_{TM} * TR$$

where $SIR_{i,t}$ is the rate at which the packets are sent into the network for a virtual connection i at time t , TR is the rate at which packets are transmitted over the virtual connection towards the destination equipment, and k_{TM} is equal to:

$$k_{TM} = 1 + \frac{FIFO_{over}}{(RTD + CMP) * \lambda * TR}$$

where $FIFO_{over}$ is the number of packets that can be stored in said queue, RTD is the time taken by a packet to make a round trip over said communications network, CMP is the time of measurement of the instantaneous data-rate over the virtual connection, and λ is a constant greater than 1 based on the response times of the components of said communications network. Hanson is also silent with regard to this relationship.

AMENDMENT
U.S. Appln. No. 08/941,236

In its rejection of claim 2 the Action indicates that Hanson teaches RTD, CMP, and λ . It is respectfully pointed out that Hanson does not describe " λ " at col. 9, lines 5-6, as alleged in the Action. This portion of Hanson describes " γ " which is a parameter selected to optimize network performance for specific traffic types having values in the range of 0.0 to 0.1. In marked contrast claim 2 recites that λ is a constant greater than 1. Furthermore, although Hanson describes RTD and CMP Hanson does not describe the relationship $\sum_i SIR_{i,i} \leq k_{TM} * TR$ as defined in claim 2. If any further Action maintains the rejection of claim 2 based on Hanson it is respectfully requested that the Action specifically point out and explain where Hanson describes or suggests this relationship so that Applicant may respond.

As Hanson does not describe each and every element of Applicant's claims, Hanson cannot serve as a basis for rejection under Section 102. Therefore, reconsideration and withdrawal of the rejection of claims 1, 2, 4, and 5 are respectfully requested.

It is respectfully submitted that the claims are in condition for allowance, and early notice of the same is respectfully solicited. If any questions remain, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

AMENDMENT
U.S. Appln. No. 08/941,236

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,

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